Before the FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

24 July 2003

In the Matter of RM-10740
Rulemaking Petition under Part 97 of
The Communications Act of 1934,
As Amended to Establish Technical Standards
For Certain Amateur Radio Telephony Transmissions

To: The Commission

Comments on The Petition

Submitted by: Robert L. Atkinson, Licensee
Amateur Radio Service Station K5UJ, FRN 0002908671
707 South 5th Avenue
Saint Charles IL 60174

1. Abstract: I begin with a rebuttal of some of the statements made by the authors of the Petition that will lead to a request for dismissal. I will end with personal testimony and a note on the conduct of Mr. Hollingsworth of the Enforcement Division vis-a-vis this proceeding.

2. Petitioners call for a bandwidth of 2.8 KHz for single sideband suppressed carrier amplitude modulated voice transmissions on the amateur bands below 28.8 MHz without providing any justification, reasoning, or a methodical engineering study to support this particular bandwidth. In the absence of such it appears to be arbitrary. Further, it conflicts with statements made twice elsewhere in the Petition in which authors claim "amateurs established a de facto maximum signal bandwidth of about three kilohertz…" (Page 2) and on page 3, that "…serious scientific studies have established that voice communication wide enough to provide 'naturalness' is achievable using audio modulating frequencies of from 300 to 3,000 Hz…[and]…frequencies above 3,000 Hz …are largely responsible for unnecessary bandwidth…" While there is no evidence to suggest that a request for a 2.8 KHz bandwidth is punitive, it is apparent in light of the above statements, that it is unnecessarily draconian and poorly thought out.

3. Page 2 contains a statement that seems to be more subjective than factual: "One group appears on the amateur bands during…contests, tweaking and adjusting their transmitters to splatter purposely, in order to provide themselves 'elbowroom' during a contest on a very crowded band." Petitioners have not presented indisputable evidence to support this claim; it should therefore be disregarded. Further, if this and other alleged deliberate activities are the basis

for, and have precipitated, this petition, it should be summarily dismissed since Part 97 currently covers malicious interference and therefore provides the FCC with a means for enforcement action should this conduct take place.

4. On page 3, petitioners claim that "…so-called 'Hi-Fi Audio' SSB transmission [has been] excoriated by Hollingsworth [FCC Enforcement Division] and hundreds of complaining amateurs." Petitioners present no evidence for "hundreds of complaining amateurs," this is therefore an unsubstantiated comment and should be disregarded. Elsewhere, on page 4, the Petition authors write that, "this situation begs attention…so that the many thousands of amateurs…can obtain relief from the opprobrious and intentional actions described in this Petition." No proof that there are "thousands" of amateurs in need of "relief" is given. The statement appears to be egregiously hyperbolic and should be disregarded.

5. Elsewhere on page 3, petitioners claim that double sideband carrier AM signals do not pose a bandwidth problem because less operators choose this mode. The logic behind this is flawed in that it ties the degree to which a modulation method is thought to be a problem to the numbers of stations employing that method. If we follow this to its logical conclusion then it could be said that I would not be causing interference were I to transmit a 30 MHz wide signal on HF since only I would be doing that. Clearly, an examination of bandwidth must be undertaken apart from its popularity, which will always be in flux.

6. On page 5 the Petition suggests that a "high-pass" circuit in the base band input of a HF single sideband transmitter would insure that transmissions would meet the petitioned standard. Besides making no sense from a technical standpoint, (a high pass filter would most likely exacerbate any perceived problems) there is a much greater potential for excessive bandwidth problems due to a high degree of audio compression and improper operation of circuits in a transmitter's RF chain. Ironically, these are conditions which degrade transmit audio quality and are therefore not normally undertaken by operators concerned with their transmit audio. Indeed, the Petition includes, on page 10, an excerpt taken from the Website of Mr. John Anning, operator of ARS station NU9N, a portion of which I will repeat here: "In fact, this station was about 3.5 KHz wide. More importantly [sic] the station was clean with excellent carrier suppression and extremely low I.M.D. (Inter-Modulation Distortion) products. This actually contributes to less bandwidth overall than some stations running a 2.4 KHz bandwidth with poor I.M.D., sometimes making them as much as 10 KHz wide!" Since the petitioners included this, they must surely realize a high-pass audio filter is not a guaranteed solution.

7. Conclusion: The Commission must realize that rule making and enforcement are different matters. Throughout the history of the Amateur Service, the Commission has for the most part, maintained a light regulatory burden on the Service. Unlike commercial services, amateurs normally have little money to pay for the facilities needed

to insure compliance with excessively restrictive regulations, such as sophisticated and exotic measuring equipment. Instead, the Commission has cultivated an environment for experimentation and innovation. This led to, among other things, the first two-way transatlantic HF digital radio communication earlier this year by amateur radio stations. Positive action on RM-10740 would discourage work to improve the art of radio communication. Because of this, and due to the poorly executed nature of the Petition as outlined above, and the fact that Part 97 currently contains regulations governing cases of malicious interference, I respectfully urge the Commission to reject the Petition.

Robert L. Atkinson

7. Personal testimony: I have been a licensed amateur radio operator for 31 years. I am currently enjoying the operation of my station with a modest amount of improvement in transmit audio over what would be achieved with a stock transmit bandwidth. This has resulted in a bandwidth increase of about 600 KHz. I have engaged many audio enthusiasts in conversations on the air and find this to be an enjoyable pastime and harmless facet of the hobby. I have never been aware of, or observed any audio enthusiast deliberately interfering with another radio station. Moreover, in my experience, the vast majority have undertaken only small bandwidth increases and their concern for fidelity in sound has resulted in transmissions with no distortion and "splatter." Furthermore, there are currently appearing on the amateur market, software defined transceivers using digital techniques to produce outstanding single sideband audio at bandwidths in the vicinity of 3 KHz. This new technological capability would be rendered pointless under a 2.8 KHz bandwidth regulation.

8. It is commonly known that DSB carrier AM produces an excellent sounding signal but at the cost of an extremely wide bandwidth for HF communications. Traditionally, SSB suppressed carrier radio telephony has been used in a utilitarian sense, as a basic voice communications tool for concentrating energy in a narrow space minus the noise of heterodyning carriers. The basic purpose of enhanced audio sideband transmitting can be stated rhetorically: Why not combine the best of both, without the disadvantages of each mode? This is the simple and harmless purpose of sideband audio improvement—to enjoy a pleasant sounding signal, but without the bandwidth and energy robbing characteristics of carrier AM. Like many others, I rejected and dismissed the activities of sideband audio enthusiasts until I began to view it in this light. It is truly a legitimate activity and I invite the Commission to view it with an open mind.

9. Correspondence from Mr. Riley Hollingsworth has indicated a bias in these proceedings: Firstly, it must be stated at once, that Mr. Hollingsworth, of the Enforcement Division, has compiled an exemplary record of work and service to the American amateur radio community. He is truly worthy of every commendation accorded him. Thanks to Mr. Hollingsworth, the American amateur bands are now largely much more enjoyable areas of RF real estate in which to reside. Unfortunately, in

this proceeding, he has demonstrated an apparent bias in favor of the position of the petitioners in advance of a fair hearing of all sides of this issue. This, one would expect, might have a prejudicial affect on the conduct and outcome of the rulemaking process. While it is often very difficult to act judiciously in an evolving situation, and make no mistake about it—I am sympathetic to that—it is my hope that Mr. Hollingsworth examines all sides of this issue with some impartiality.